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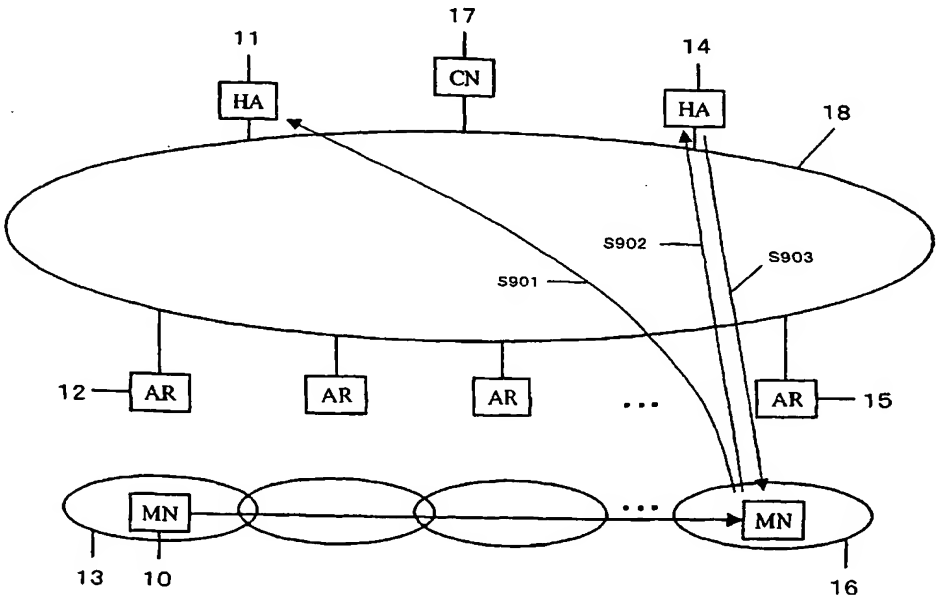
[Continued on next page]

(54) Title: MOBILE NODE, ROUTER, SERVER AND METHOD FOR MOBILE COMMUNICATIONS UNDER IP VERSION 6 (IPV6) PROTOCOL



(57) Abstract: In a mobile communication system supported with IP version 6, a mobile node (10) measures at least one of a hop number or communication delay time to a belonging home agent (11). When the result of measurement is equal to or greater than a predetermined value, registration deletion is requested to the belonging home agent (11) while registration is requested to a new home agent (14). The belonging home agent (11) deletes the registration of mobile node (10), and the new home agent (14) registers the mobile node. This can reduce the load on an IP network (18) and decrease data delay.

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 134 991 A (NOKIA CORP) 19 September 2001 (2001-09-19) abstract paragraph [0002] - paragraph [0006] paragraph [0017] - paragraph [0025] paragraph [0039] - paragraph [0041]; figures 2-4 ----- -/--	1-8, 25-30

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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9 October 2003	30. 12. 03

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European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Buhleier, R

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	BHATTACHARJEE S ET AL: "Application-layer anycasting" INFOCOM '97. SIXTEENTH ANNUAL JOINT CONFERENCE OF THE IEEE COMPUTER AND COMMUNICATIONS SOCIETIES. DRIVING THE INFORMATION REVOLUTION., PROCEEDINGS IEEE KOBE, JAPAN 7-11 APRIL 1997, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, 7 April 1997 (1997-04-07), pages 1388-1396, XP010251961 ISBN: 0-8186-7780-5 page 1388, line 1 - page 1393, last line ; figures 1-3	1-8, 25-30
A	HEISSENHUBER F ET AL: "HOME AGENT REDUNDANCY AND LOAD BALANCING IN MOBILE IPV6" BROADBAND COMMUNICATIONS. PROCEEDINGS OF THE INTERNATIONAL IFIP-IEEE CONFERENCE ON BROADBAND COMMUNICATIONS, XX, XX, 10 November 1999 (1999-11-10), pages 235-244, XP009002035 abstract 1. Introduction - 2. Home Agent Load Balancing Mechanism page 235 - page 237	1-8, 25-30
A ✓	WO 98/57275 A (KAVAK NAIL ;TELIA AB (SE)) 17 December 1998 (1998-12-17) page 3, line 15 - line 20 page 5, line 10 - line 14 page 5, line 34 - page 8, line 12 figure 2	1-8, 25-30
A	PARK V D ET AL: "Anycast routing for mobile networking" MILITARY COMMUNICATIONS CONFERENCE PROCEEDINGS, 1999. MILCOM 1999. IEEE ATLANTIC CITY, NJ, USA 31 OCT.-3 NOV. 1999, PISCATAWAY, NJ, USA,IEEE, US, 31 October 1999 (1999-10-31), pages 1-5, XP010369528 ISBN: 0-7803-5538-5 page 1 - page 4, left-hand column, last line ; figures 3,5	1-8, 25-30

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International Application No
PC[redacted]P 03/04898

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	D. JOHNSON, S. DEERING: "Reserved IPv6 Subnet Anycast Addresses (RFC 2526)" IETF NETWORK WORKING GROUP (RFC 2526), [Online] March 1999 (1999-03), pages 1-7, XP002257008 Retrieved from the Internet: <URL:http://rfc-editor.org> [retrieved on 2003-09-30] page 1, line 1 - page 2, line 10 page 4, paragraph 4. -----	1-8, 25-30
A	PERKINS C E ET AL: "MOBILITY SUPPORT IN IPV6" MOBICOM. PROCEEDINGS OF THE ANNUAL INTERNATIONAL CONFERENCE ON MOBILE COMPUTING AND NETWORKING, XX, XX, November 1996 (1996-11), pages 1-11, XP002901803 the whole document -----	1-8, 25-30

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